

SELF-ORGANIZED TEACHERS LEARNING TO OVERCOME THE CHALLENGES OF REMOTE STUDIES

Sarmite Cernajeva¹ and Anna Vintere²

¹Riga Technical University, Zunda krastmala 10, Riga, Latvia, LV-1048

²Latvia University of Life Sciences and Technologies, Liela Street 2, Jelgava, Latvia, LV-3001

ABSTRACT

The time of Covid-19 required appropriate infrastructure, effective planning, digitally competent adult teachers, high quality training content, user-friendly tools, as well as digitally competent learners, to make education and training systems in the digital area. The readiness of the teacher to implement the remote studies, digital skills and ability to learn, as well as mutual cooperation were the determining factors in ensuring quality education during the Pandemic. This article provides a brief insight into a survey of university teachers about the challenges and disadvantages of distance learning, and describes how teachers developed their skills by collaborating and teaching each other.

KEYWORDS

Digital Tools, Remote Studies, Self-Organized Learning, Digital Skills

1. INTRODUCTION

In 2020, due to the Covid-19 pandemic, a technological revolution took place in education: if the positive and negative effects of technology on the development of pupils and students were previously discussed, then due to the pandemic, within a week, all educational institutions switched to the remote learning process. In Latvia, as in other countries, such rapid transformation is associated with various obstacles and challenges. It wasn't just internet speed and technology availability. The role of the teacher changed during distance studies compared to face-to-face classes. Therefore, the most important thing in this process was the teacher's motivation and readiness to implement the remote learning process and his attitude towards such changes.

This was a time of challenges and self-consistent planning and planned implementation, because everyone who was directly or indirectly involved in the educational process had to adapt, change and live with the new conditions. Also, this situation did not give many options to the university lecturers of the authors of this article, where the only alternative to digital learning would be not learning at all. Considering the wide range of digital tools that can be used for the implementation of the learning process, the teachers faced insecurity and confusion from the variety of ICT tools.

The purpose of this study is to summarize the challenges faced by faculty during distance learning, as well as to identify ways to overcome these challenges, focusing on teachers self-organized learning.

2. BODY OF PAPER

The time of Covid-19 made it clear that some digital tools, such as "Zoom", "Google Hangouts", "MS Teams" calls or using "WhatsApp" in a web browser, are new skills that need to be learned and take time. Some European countries have developed special guidelines for the digital competence of teachers (in Spain, Croatia, Lithuania, Austria, Norway and Serbia) or special digital competence standards (in Estonia and Ireland) (European Commission, 2019). In Latvia, there are no specially developed guidelines or standards for the digital competence of pedagogues. The situation of the COVID-19 pandemic created the need to implement distance learning in universities, and this determined the urgency of identifying the needs of pedagogues and studying the content of the digital competence necessary for the pedagogue and the forms of

its development. By studying employment statistics data and their relationship with the level of education in European countries, it was confirmed that full-fledged conscious lifelong learning ensures the effective functioning of the personality in the professional and social sphere.

To summarize the challenges faced by teaching staff during remote studies, a survey of teaching staff at both universities was conducted. A total of 169 respondents answered the questionnaire. Microsoft Excel program was used to process the quantitative data obtained in the study, their statistical analysis, as well as visualization of the processed data.

The authors' survey results show that in 69.2% cases the remote studies were limited by the lack of knowledge and skills in the use of various information and communication technologies tools. 76.9% of respondents confirmed that the conditions limiting distance learning were the lack of technical capacity to conduct online lessons (appropriate computer, camera, audio, etc.), but 84.6% - stated that industry-specific software or a license to use it remotely is missing.

It was also a new situation for the teachers, both psychologically and practically. Analyzing the experience, advantages and disadvantages were also highlighted. The lecturers named the most visible benefits of remote studies:

- greater independence "at the workplace", the opportunity to prove that the teacher can also work productively from home;
- comfortable and pleasant environment when working at home;
- it is possible to provide individual feedback to each student in a calm, thoughtful manner;
- necessity to change your thinking and learn to adapt to new conditions;
- learning new skills, such as creating and conducting online classes;
- possibility/necessity to search for and use new, interesting digital tools to diversify teaching;
- identifying new learning methods that can also be used face-to-face;
- change of attitude – every employee becomes his own manager;
- improving digital skills, learned new work methods; a new opportunity to use platforms that were not previously worked on;
- new communication culture, self-organization skills, tolerance, ability to act in unexpected circumstances; etc.

As indicated by 92.3% of the surveyed teachers, the biggest disadvantage was that the provision of remote studies significantly increased the workload. Other disadvantages were also mentioned:

- health disorders - back, neck, eyes, mental health;
- burnout, overload, misunderstandings, inaccuracy, inability to read or express emotions;
- loss of student interest;
- the boundary between working hours and the teacher's private life disappears;
- incompatibility of computer and telephone operating systems;
- overload, which can lead to uniformity in the selection, preparation and implementation of teaching methods, forms, tasks in practice;
- too much work is planned for one lesson;
- willingness to learn how to use different platforms and tools that have not been used before, etc.

The main challenge, however, was how not to get confused by the variety of digital tools, how to choose tools based on reliability, quality, availability, user-friendliness. According to "Strategies for building and maintaining a skilled workforce", "the digital era has provided the opportunity and the need for speed – and that, in turn, has led to new ways of working. Remote working, require new skills for the workforce"" (IBM, 2019).

Although, according to the Eurydice report "Digital Education at School in Europe", in order to fulfill their professional duties, the educator had to develop a set of knowledge, skills and attitudes that enable the use of digital technologies for planning and implementing the learning process (European Commission, 2019), however, in research (Crawford , et al., 2020) for higher education, it is expressed that many teaching staff initially focused only on the transfer of content in the online environment and not on online pedagogy.

In order to ensure high-quality remote studies, self-organized professional development of teachers took place from November 2020 to April 2021 at the initiative of the social enterprise "Educational Support Office". Every Friday afternoon, teachers met online and learned together, sharing their knowledge and experiences. Some topic learned:

- Work on Zoom, Microsoft Teams and BigBlueButton (BBB) video conferencing platforms;

- Testing in Moodle, Microsoft Teams and using Google Forms;
- Use of Wordwall, LearningApps, OneDrive cloud storage and e-book Express DigiBook to create learning content;
- Use of Polling, Breakout room, Multiuser whiteboard on BBB and ZOOM platforms (for group work / collaboration);
- ICT tools for distance learning of mathematics: use of a graphic tablet, WhatsApp, software GeoGebra and desmos.com graphic calculator, failiem.lv; application of LaTeX language elements for writing mathematical formulas;
- Tools for synchronous and asynchronous communication in remote studios - Mentimeter, Slido.com, Kahoot, WhatsApp, Edpuzzle.com;
- Visualization with Canva, etc.

The approach, when one or more students teaching other students (here teachers) teach each other in a particular subject area, is peer learning (Whitman, 1998). Working together to facilitate one's own and each other's learning they also collaborate to learn new things (Johnson et al. 1990). Involvement in learning, involvement with other students are factors that make success. Also, for teachers as learners.

3. CONCLUSION

The positive aspect of organizing the remote learning process was the need to mobilize for work, evaluating one's resources, skills and opportunities, and learning new digital skills.

Teachers self-organized learning is one of the alternatives to acquire the necessary digital skills and collaborative teachers peer learning makes great success.

The methods that are recommended to be used in the university were used by the teachers themselves to improve their digital skills.

Although teachers have acquired new competencies, the need for courses or seminars to be able to continue remote studies in a quality way is still a topical issue.

REFERENCES

- Crawford, J. et al, 2020. COVID-19: 20 countries' higher education intra-period digital pedagogy responses. *Journal of Applied Teaching and Learning (JALT)*, 3(1).
- European Commission/EACEA/Eurydice, 2019. *Digital education at school in Europe*. Eurydice report. Luxembourg: Publications Office of the European Union, <https://op.europa.eu/en/publication-detail/-/publication/d7834ad0-ddac-11e9-9c4e-01aa75ed71a1>
- IBM, 2019. *The enterprise guide to closing the skills gap*. Strategies for building and maintaining a skilled workforce. Research Insights, <https://www.ibm.com/thought-leadership/institute-business-value/report/closing-skills-gap#>
- Johnson, D.W., et al, 1990. *Circles of Learning: Cooperation in the Classroom*. Edina, MN: Interaction Book Company.
- Whitman, N., 1988. *Peer Teaching: To Teach is to Learn Twice*. ASHE-ERIC Higher Education Report No. 4, Washington, DC: ERIC Clearinghouse on Higher Education.